

REMARKS

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Respectfully submitted,

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MARKED-UP VERSION SHOWING CHANGES MADE

IN THE CLAIMS:

Claims 1-14 have been amended in the following manner:

1                   1. (Amended) [Method] A method for the elimination of spurious signal  
2                   components (SS) in an input signal (ES), said method consisting of  
3                   - the characterization, in a signal analysis phase (I), of signal components of the  
4                   spurious signal components (SS) and of [the] an information signal (NS) contained in the  
5                   input signal (ES), and  
6                   - the determination or generation, in a signal processing phase (II), of the  
7                   information signal (NS) or an estimated information signal (NS') on the basis of the  
8                   characterization obtained in the signal analysis phase (I),  
9                   said characterization of the signal components (SS, NS) being performed under  
10                  utilization at least of auditory-based features ( $M_1$  to  $M_j$ ).

1                   2. (Amended) [Method] The method as in claim 1, [whereby one or several]  
2                   wherein at least one of the following auditory features ( $M_1$  to  $M_j$ ) are used for the  
3                   characterization of the signal components (NS, SS): [Loudness] loudness, spectral  
4                   profile, harmonic structure, common build-up and decay times, coherent amplitude and  
5                   frequency modulation, coherent phases, interaural runtime and level differences.

1                   3. (Amended) [Method] The method as in claim 1 [or 2, whereby], wherein the  
2                   auditory features ( $M_1$  to  $M_j$ ) are determined in different frequency bands.

1 4. (Amended) [Method] The method as in [one of the claims 1 to 3, whereby]  
2 claim 1, wherein the characterization of the signal components (SS, NS) is performed by  
3 evaluating the features ( $M_1$  to  $M_j$ ) determined in the signal analysis phase (I), employing  
4 [the] a primitive-grouping method.

1 5. (Amended) [Method] The method as in [one of the claims 1 to 3, whereby]  
2 claim 1, wherein the characterization of the signal components (SS, NS) is performed by  
3 evaluating the features ( $M_1$  to  $M_j$ ) determined in the signal analysis phase (I), employing  
4 [the] a scheme-based grouping technique.

1 6. (Amended) [Method] The method as in claim 5, [whereby] wherein a  
2 hypothesis is established or specified on the nature of the signal component (SS, NS) and  
3 is taken into account in the grouping of the identified features ( $M_1$  to  $M_j$ ).

1 7. (Amended) [Method] The method as in claim 5 or 6, [whereby,] wherein for  
2 the characterization of the signal components (NS, SS), at least the auditory features [and,  
3 as applicable, other features] ( $M_1$  to  $M_j$ ) are grouped along the principles of [the] a gestalt  
4 theory.

1 8. (Amended) [Method] The method as in [one of the claims 1 to 7, whereby]  
2 claim 1, wherein the signal components identified as spurious noise components (SS) are  
3 suppressed and/or the signal components identified as information signals (NS) or  
4 estimated information signals (NS') are amplified.

1           9. (Amended) [Method] The method as in [one of the claims 1 to 8, whereby]  
2           claim 1, wherein the information signal (NS) or an estimated information signal (NS')  
3           is synthesized in the signal processing phase (II) on the basis of the features ( $M_1$  to  $M_i$ )  
4           detected in the signal analysis phase (I).

1           10. (Amended) [Method] The method as in [one of the claims 1 to 7, whereby,]  
2           claim 1, wherein with the aid of an analysis of the harmonic structure in the signal  
3           analysis phase (I), different base frequencies of the signal component of the information  
4           signal (NS) or of the estimated information signal (NS') are extracted and, with the aid  
5           especially of a loudness or LPC analysis, spectral levels of harmonics of these signal  
6           components are defined, and on the basis of the spectral levels and the harmonics an  
7           information signal for tonal speech components is synthesized.

1           11. (Amended) [Method] The method as in [one of the claims 1 to 7, whereby,]  
2           claim 1, wherein with the aid of an analysis of the harmonic structure in the signal  
3           analysis phase (I), nontonal signal components of the information signal (NS) or of the  
4           estimated information signal (NS') are extracted and, with the aid especially of a  
5           loudness or LPC analysis, spectral levels of these signal components are defined, and  
6           with the aid of a noise generator an information signal for nontonal speech components  
7           is synthesized.

1           12. (Amended) [Method] The method as in claim 10 or 11, [whereby] wherein  
2           the information signal (NS) and/or the estimated information signal (NS') is amplified.

1 13. (Amended) Application of the method [per one of the claims 1 to 12]  
2 according to claim 1 for operating a hearing aid.

1 14. (Amended) Hearing air operating by the method [per one of the claims 1 to  
2 12] according to claim 1.